B. Claims

The following is a complete listing of the claims, and replaces all earlier versions and listings.

1-73. (Cancelled)

- 74. (Currently Amended) A method of detecting a complex formed between an oligonucleotide having a known base sequence as a probe and an object component capable of binding to the oligonucleotide, the oligonucleotide being selected from plural types of oligonucleotides having known base sequences different from one another, for determining whether the object component is contained in each of at least a first liquid test sample and a second liquid test sample 64 to 3600 liquid test samples, comprising the steps of:
- (i) preparing a detection substrate having a plurality of square sections, each square section being from 500 μm square to 6 mm square, wherein the square sections are arranged in a matrix form on a solid substrate without a height dividing the plurality of square sections, with the square sections fixing the plural types of oligonucleotides having known base sequences different from one another in such a manner that one type of oligonucleotide is present at a uniform surface density in the each said square section;
- (ii) spotting a predetermined amount of the first liquid test sample 64 to 3600 test samples in the each square section at individual, separate spots in the each square section and spotting a predetermined amount of the second liquid test sample in the each square section at individual, separate spots in the each square section so that the individual, separate spots within the each square section are sufficiently spaced from each other within

the each square section to conduct a complex-forming reaction between the oligonucleotide and the object component in each spot; and

- (iii) detecting whether a complex formed between the oligonucleotide and the object component is present or not in the each spot.
- 75. (Currently Amended) The detection method according to claim 74, wherein the predetermined liquid amount of each of the test samples is spotted in the step (ii) so that spot positions in the each section are arranged in the same way as one another.
- 76. (Currently Amended) The detection method according to claim 74, wherein each spot of the test samples is formed by supplying [[the]] a predetermined liquid amount of each of the test samples by an ink-jet method.

77-78. (Cancelled)

79. (New) The detection method according to claim 76, wherein the predetermined amount of each of the test samples is selected so that each spot has a spot diameter not exceeding 100 μ m.